

# Comprehensive Highway Safety Plan

**June 2005**

Prepared by  
**NORTH DAKOTA  
DEPARTMENT OF  
TRANSPORTATION**  
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## **NORTH DAKOTA DEPARTMENT OF TRANSPORTATION SAFETY AREAS**

**The mission of the North Dakota Department of Transportation is**

***“Providing a transportation system that safely moves people and goods.”***

**The goal of the Objective 2.3 committee is to**

***“Increase safety on North Dakota’s transportation system and within the Department of Transportation”***

**The objective is to**

***“Develop and implement a safety plan that reduces transportation-related reportable crashes, injuries, and fatalities relative to vehicle miles traveled (VMT) by 10% NLT December 31, 2007.”***

## Part 1: NORTH DAKOTA DOT SAFETY AND EDUCATION AREAS

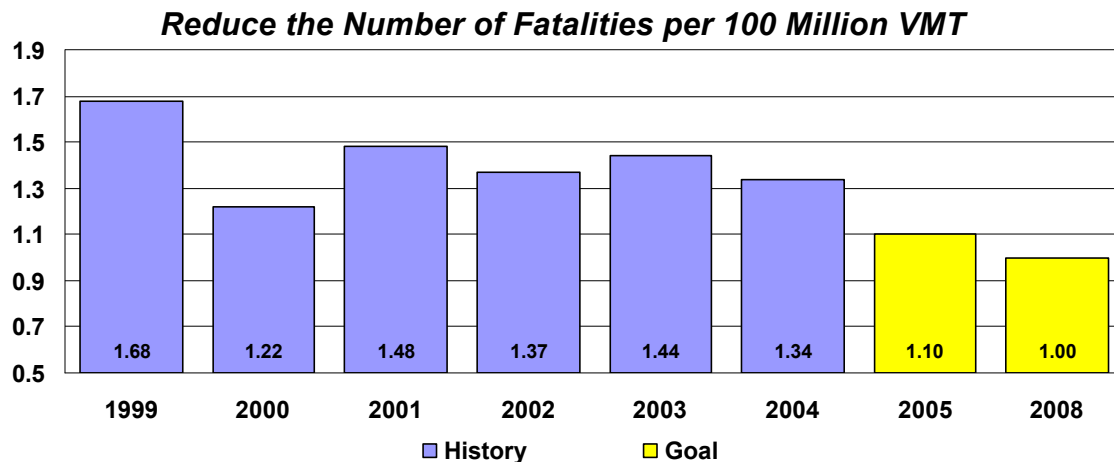
*The mission of the Traffic Safety Office is to reduce motor vehicle crashes on public roadways and the fatalities, injuries, and property damage associated with these crashes.*

The North Dakota Highway Safety Plan is designed as a planning document, a federal grant request, and a state budget document. The Problem Identification section, which is an analysis of crash data and other related traffic safety data, is used as a basis for identifying areas of need and developing countermeasures strategies. The North Dakota Highway Safety Plan is prepared according to federal guidelines to meet federal regulations.

### **REDUCE THE NUMBER OF FATAL, INJURY, AND TOTAL CRASHES**

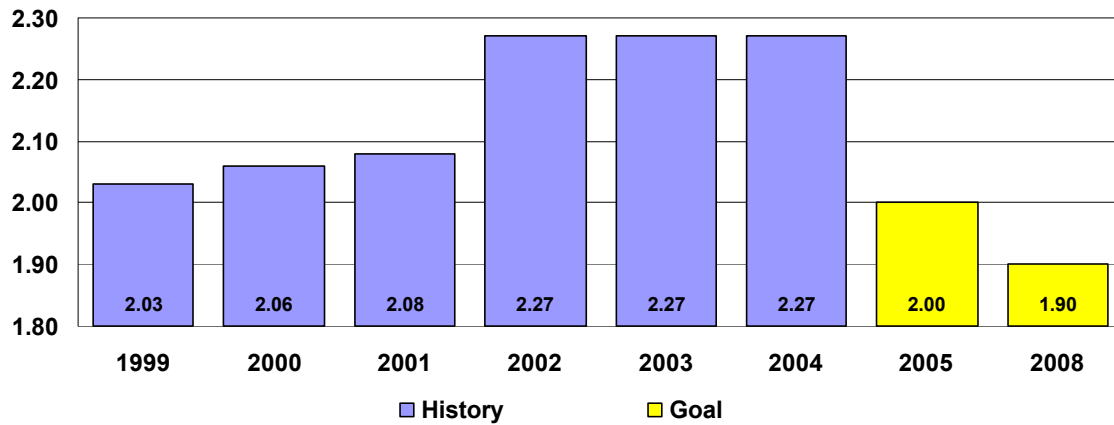
#### Background

For several years, North Dakota ranked amongst the lowest in the nation for highway deaths relating to motor vehicle crashes. However, the past five years has shown a constant level of fatalities per VMT (vehicle miles traveled). The following are performance measures identified in the 2004 ND Highway Safety Plan.

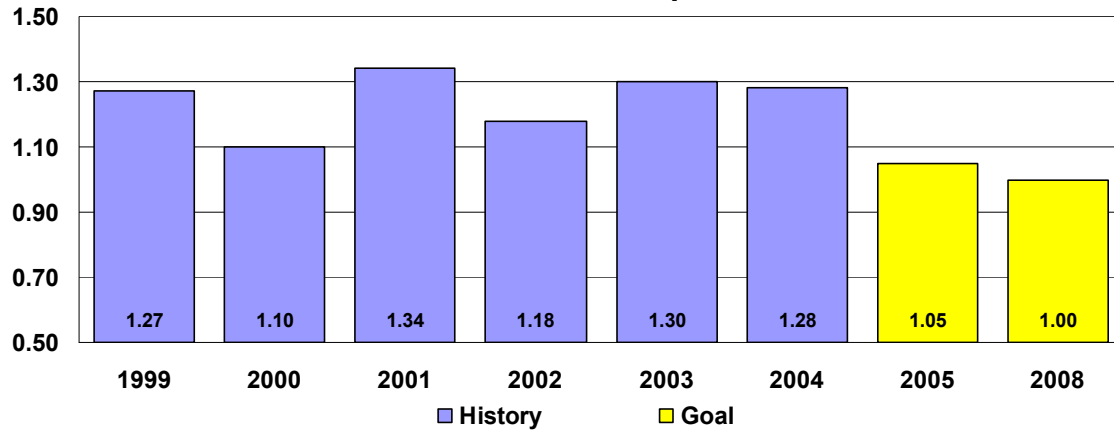


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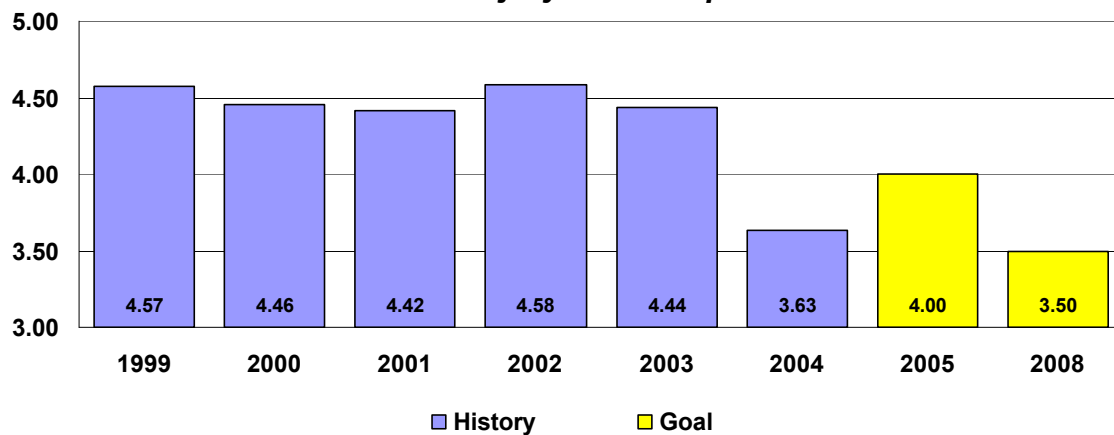
***Reduce Number of Crashes per 100 Million VMT***



***Reduce Number of Fatal Crashes per 100 Million VMT***



***Reduce the Number of Injury Crashes per 100 Million VMT***



## **1. INCREASE THE USE OF SAFETY RESTRAINTS FOR ALL OCCUPANTS**

### **Background**

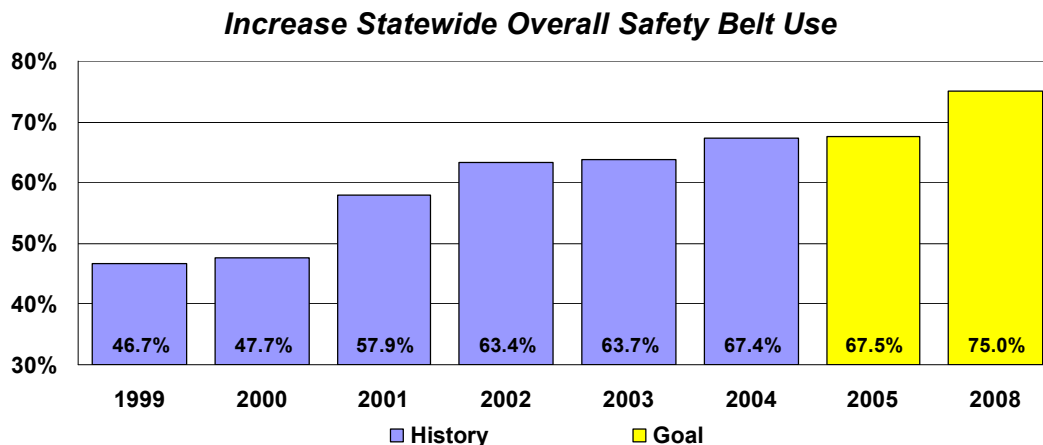
North Dakota's safety belt usage observed in June 2004 was 67.4%, the highest rate ever in the state. However, more than 50% of motor vehicle fatalities in 2004 were not wearing proper restraints.

### **Goal**

To increase statewide awareness, enforcement, and correct use of occupant protection devices

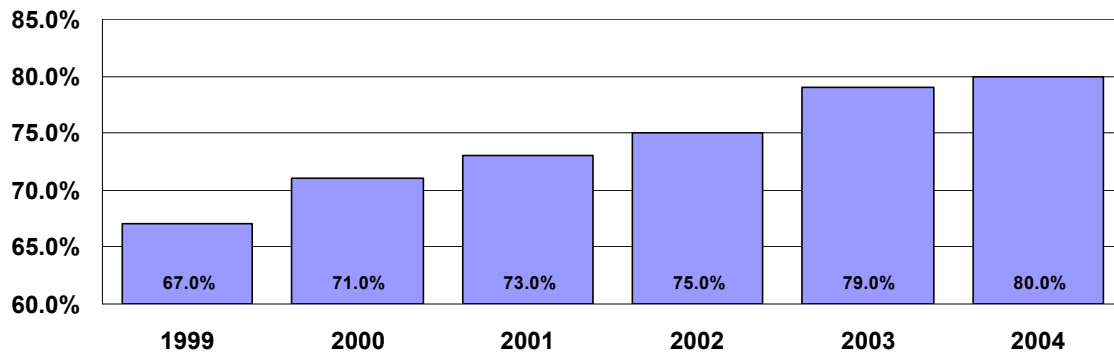
### **Existing Strategies**

- Continue multi-agency statewide law enforcement/public information blitzes under the Click It or Ticket campaigns in November and May.
- Continue to fund the Child Passenger Technician training and the statewide distribution of car seats
- Continue to promote the worksite and school safety programs
- Encourage the use of booster seats with immunization programs and the "Give Your Child a Boost" educational campaign
- Continue to support safe communities programs in their local efforts to promote seat belt use for all ages
- Support the passage of a primary safety belt law



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## ***National Seat Belt Use***



## 2. REDUCE IMPAIRED DRIVING

### Background

In 2004, North Dakota experienced a dramatic reduction in the number of alcohol-related fatalities which can be attributed to enhanced alcohol sanctions and stronger enforcement efforts.

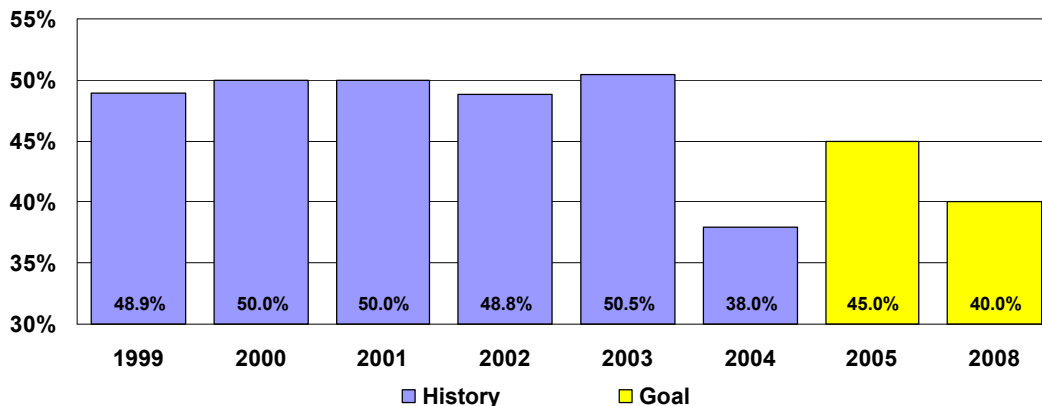
### Goal

To reduce the incidence of alcohol- and drug-impaired driving and to provide support for youth safety programs.

### Existing Strategies

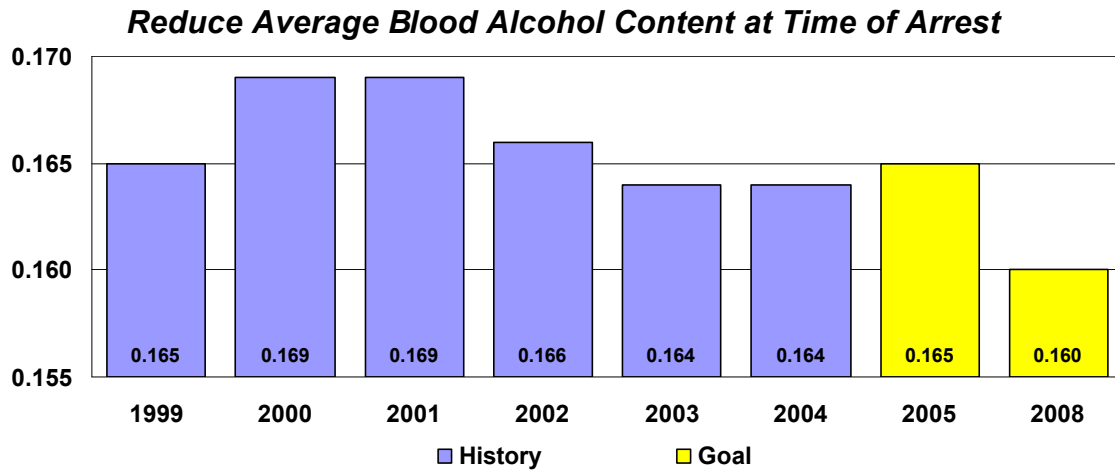
- Conduct multi-agency statewide law enforcement/public information crackdowns during the spring events and Labor Day holiday.
- Continue to support the local driving under the influence programs through funding equipment and manpower.
- Continue to support the Drug Recognition Expert Training program.
- Continue existing DUI training programs for law enforcement officers, hearing officers, and prosecutors.
- Expand current high school and college underage drinking education and awareness programs.
- Increase the number of checkpoints conducted statewide.
- Assist safe communities programs in developing plans to combat underage drinking.
- Provide DUI awareness materials to agencies/groups for public distribution.
- Provide training opportunities for traffic safety advocates regarding alcohol and impaired driving.
- Implement alternative sentencing options for the judicial system.
- Organize a statewide alcohol forum to discuss the critical issues involving alcohol impaired driving for all ages.

#### ***Reduce Percentage of Alcohol - Related Fatal Crashes***





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### 3. IMPROVE MOTORCYCLE SAFETY AND AWARENESS

#### Background

Motorcyclists suffered more than a 100% increase in the number of fatalities from 2003 to 2004. This dramatic increase is due in part to the increasing number of re-entry riders and the increase in the number of registered motorcycles.

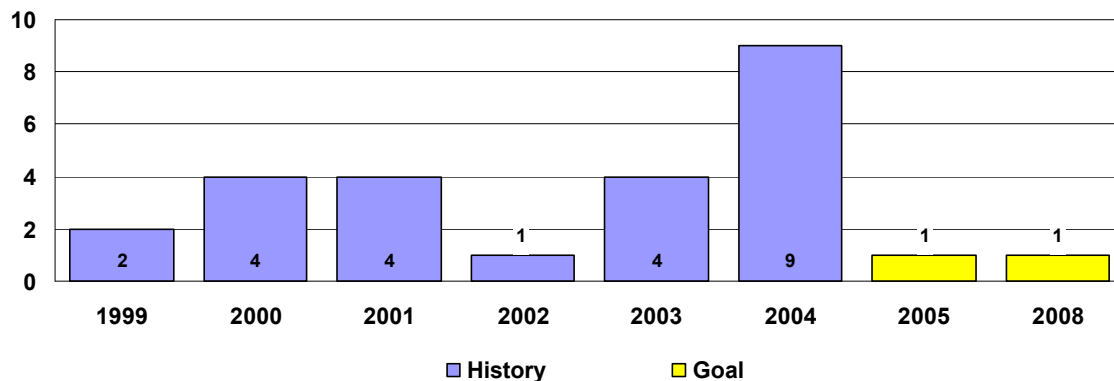
#### Goal

To administer a comprehensive, statewide motorcycle safety program.

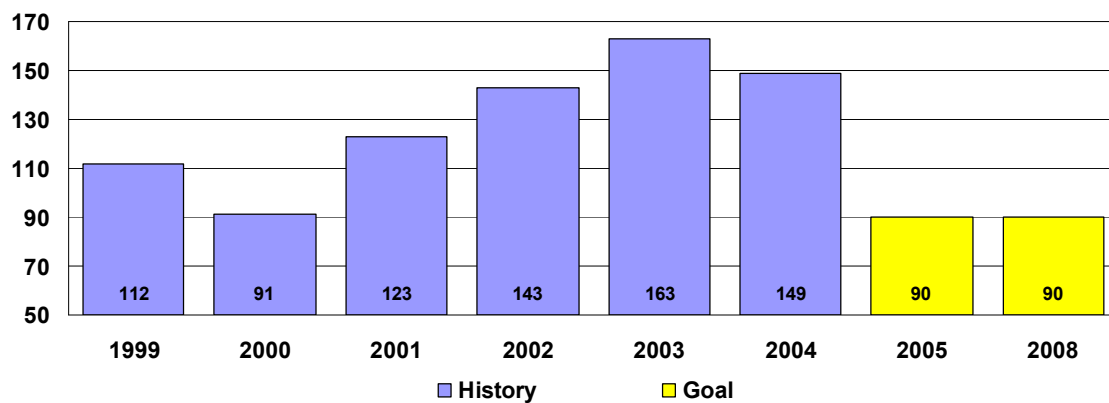
#### Existing Strategies

- Continue to support the North Dakota Motorcycle Safety Program which trains riders how to safely and skillfully operate a motorcycle.
- Support legislation to increase funding to the rider training course.

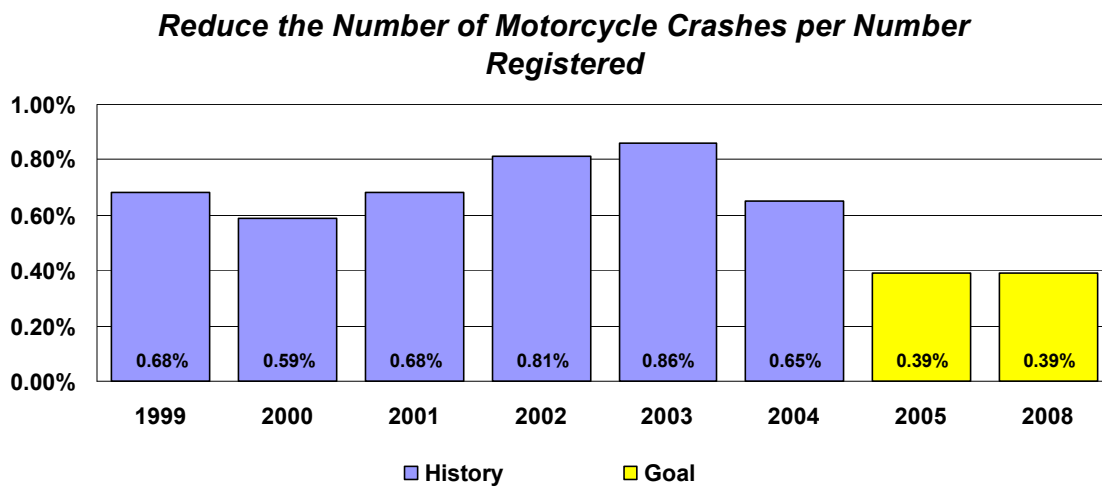
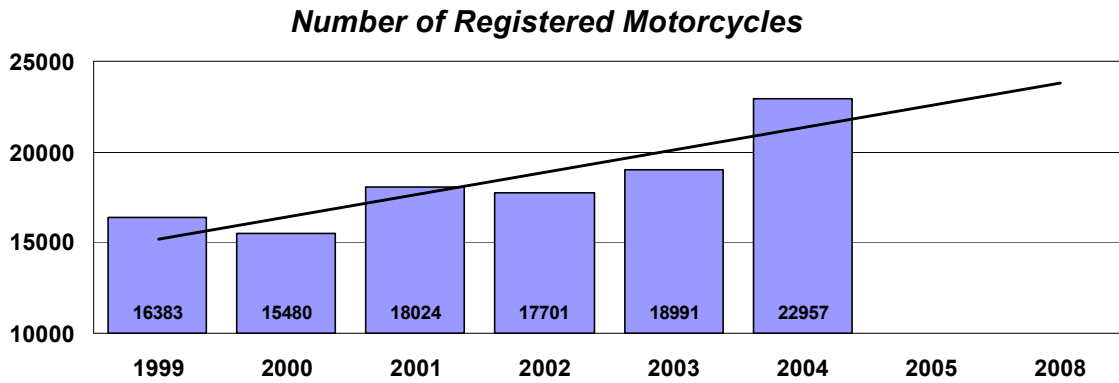
#### ***Reduce the Number of Motorcycle Related Fatalities***



#### ***Reduce the Number of Motorcycle Crashes***



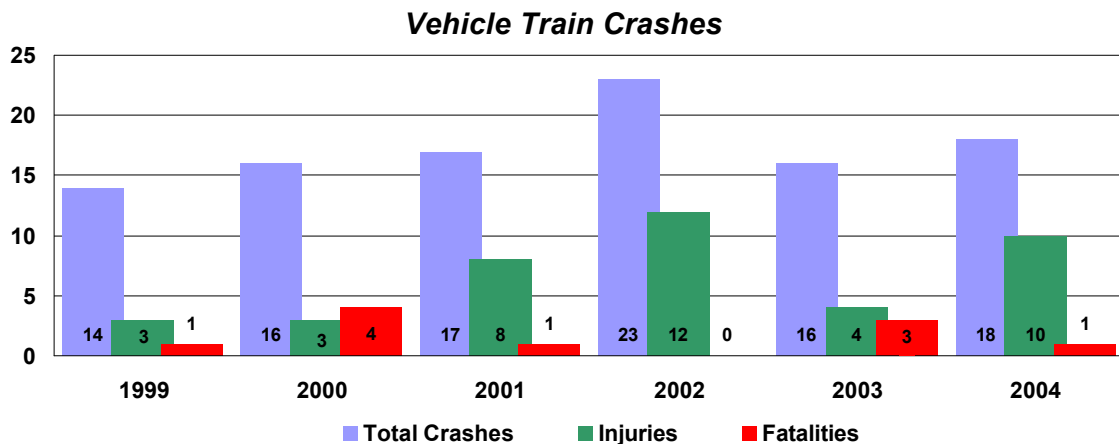
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## 4. REDUCE VEHICLE TRAIN CRASHES

### Background

There are about 6,000 at grade highway – rail crossings in ND. About 4,200 of these are on public roads. There were 18 vehicle – train (VT) crashes in 2004, which represents less than 1% of total crashes for the year. There was one fatal VT crashes, representing 1% of total fatalities. There were ten VT crashes that resulted in injury, which represents less than 1% of all injury crashes in ND in 2004.



### Existing Strategies

- Continue support of Operation Lifesaver Activities.
- Continue to work with railroads and local jurisdictions to support crossing closures.
- Continue to work with railroads and local jurisdictions to support upgrading selected passive crossings.
- Continue to support public information and enforcement actions.

## 5. IMPROVE YOUNGER DRIVER AND OLDER DRIVER SAFETY

### Minors Driver License

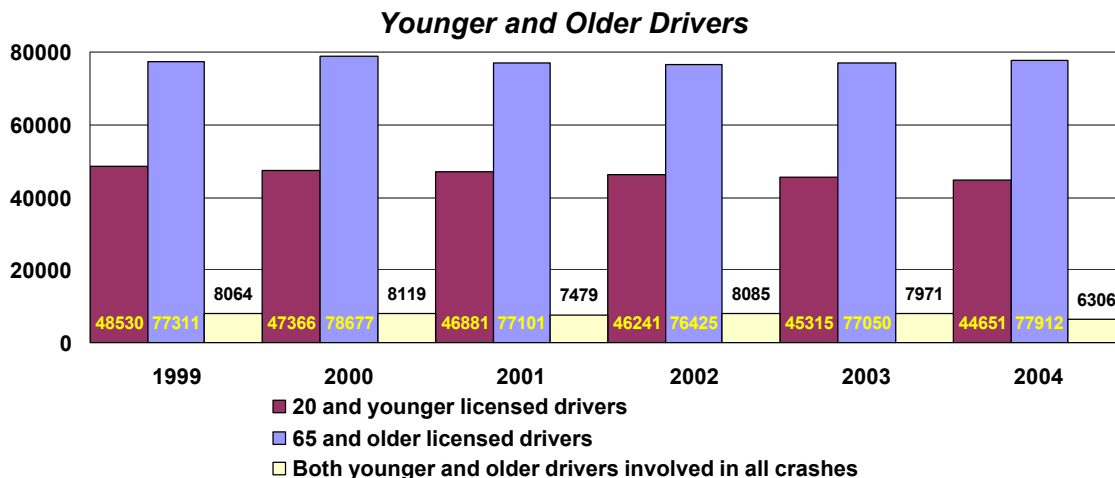
North Dakota has a minors licensing law for persons under the age of 18 because new drivers are involved in a significant number of crashes.

Any person who is at least 14 years old may apply for an Instruction permit. This instruction permit is valid for a period of one year. The permit holder must be accompanied by a licensed driver at least 18 years of age who has had at least three years of driving experience. An individual other than the supervising driver and the permit holder may not be in the front seat unless the vehicle has only one seat, in which case, the supervising driver must be seated next to the permit holder.

The instruction permit must be held for six months prior to completing the road test for an operator's license. If under the age of 16, driver's education must also be completed prior to road testing. Upon successful completion of the road test, a restricted license will be issued. Anyone under the age of 16 is restricted to the parent or legal guardian's vehicles or to vehicles equipped with dual controls. Anyone under the age of 16 cannot carry more passengers than the vehicle manufacturers suggested passenger capacity.

The director shall cancel the permit or license of a minor under 18 years of age who accumulates six or more points on their driving record or commits an alcohol-related offense while operating a motor vehicle.

North Dakota statistics show that more than 16% of the 464,762 driver's license holders are age 65 and older, with 8,144 being drivers 85 and older. There were 19 drivers over 65 killed and 352 seriously injured in traffic crashes in 2004.



## **Part 2: INFORMATION AND DECISION SUPPORT SYSTEMS**

### **Improve information and decision support systems**

#### Background

Understanding and making optimal use of information technology is a critical challenge facing North Dakota's traffic safety professionals. Knowing how, when, where, and why traffic crashes have occurred is the foundation of a comprehensive traffic safety analysis system. This crash data coupled with driver records must be available to all stakeholders so proper decisions can be made and the most effective safety policies and projects can be developed and implemented. Understanding and using integrated traffic records data to plan and assess safety programs, as well as leverage critical resources, is needed to protect public safety. Systems currently in place must be assessed and improved to meet the needs of today's safety professionals.

#### Goal

To establish and maintain accurate, reliable, and consistent data gathering, analysis, and reporting processes.

#### Strategies

*Establish and maintain a web page to inform NDDOT customers, employees and stakeholders of research and other projects that affect traffic safety.*

- Continue to maintain the existing website with timely information relating to roadway safety.
- Check what information is currently available in hard copy or electronic format in the areas of research projects, special studies, Traffic safety projects, and innovative projects.
- Set up a template as to what information is needed on the web site to answer the who, what, when, where, why, and how questions.
- Monitor the web page as to the extent of usage, amount of information, length of time information should remain, etc.

*Identify, acquire, and implement technologies available to collect, analyze, and disseminate traffic safety data in a timely and accurate manner.*

- Identify what is presently underway at the state and local levels, plus other new technology that is available.
- Continually monitor activities in progress, including posting them on the web page described in strategy #1.
- Be proactive in marketing and implementing promising new technologies as they become available.

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- Provide crash data system enhancements and provide easy, in-house access to data.
- Provide training to law enforcement on proper completion of the crash report form.
- Promote and support the work of the Traffic Records Coordinating Committee who provide statewide input on proposed enhancements regarding traffic data projects.
- Implement the Traffic Records Strategic Plan.

*Develop a statewide traffic safety data repository for customers, employees and stakeholders.*

- Continuously review the data needs of customers, employees and stakeholders.
- Determine the process to best provide customers, employees and stakeholders access to traffic safety data.
- Maintain statewide traffic safety data repository in a timely manner.
- Continue to publish the *North Dakota Traffic Trends* and *North Dakota Vehicle Crash Facts*, which contain detailed traffic safety information.

## **1. Traffic Records Strategic Plan**

### **Background**

According to the *National Agenda for the Improvement of Highway Safety Information Systems*, a product of the National Safety Council's Traffic Records Committee:

*"Highway safety information systems provide the information which is critical to the development of policies and programs that maintain the safety and the operation of the nation's roadway transportation network."*

The North Dakota Department of Transportation reflects that goal through its mission statement: "providing a transportation system that safely moves people and goods". To accomplish its mission, the Department of Transportation compiles and analyzes data from numerous data sources using a mixture of communication mechanisms - electronic, paper, and individual communications. The DOT then publishes the compiled information for their stakeholders' analysis and decision-making.

The purpose of North Dakota's Traffic Records Strategic Plan (this document) is to define a multi-year strategy to make the analysis and publication more efficient, timely and accurate. This strategic plan describes the goals, priorities, and methods used to accomplish these needs and to further build an integrated statewide traffic records information system. Additionally, this document is meant to be a living document, updated periodically to reflect progress, changes, and new requirements. This plan is meant to define projects and initiatives for the next two to five years.

### **Objectives**

The objective of the Traffic Records Strategic Plan is to provide a documented, organized, and cohesive plan to enhance North Dakota's capability to set, measure, and meet both North Dakota and National Highway Traffic Safety Administration Objectives.

Additionally, this plan will communicate how each of the agencies' respective data can be integrated into a single virtual system that provides the broadest information scope to the widest range of users. And, that the scope can be positively influenced by a cooperative and planned effort with minimal impact on resources.

Finally, this plan will provide strategic and long-range direction to be adopted during the various agency planning and system change processes. The guidance should assist agency information technology management in resource decision-making because they will see more clearly how their decisions may impact the entire strategy.

### **Executive Summary**

The Traffic Records Strategic Plan has been developed through a cooperative process with Law Enforcement, Engineering, Health, Safety, Judicial, and Information Technology



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representatives statewide. The Strategic Plan development process included an assessment by the National Highway Traffic Safety Administration Assessment Team in October 1999, interviews with members of the aforementioned agencies, meetings, and open discussions.

The outcome of the process, this Strategic Plan, describes the goals, requirements, and initiatives to plan for and integrate, and more effectively use the state's traffic safety systems and data. Integrating these systems and data will provide the capability to more effectively and efficiently accomplish end-to-end traffic data analysis. This end-to-end analysis will allow agencies to more quickly and accurately track, trend and analyze traffic safety issues and the effects of related mitigation efforts. This will, in turn, allow the state to develop more effective mitigation programs and safer road designs, which will lead to safer roads and improved traffic safety.

Full implementation of the system and data integration initiatives will cover several years and require efforts by all the respective state agencies. At a minimum, each agency will assist in the analysis and integration planning for their respective data and systems. This analysis and planning will provide them with strategic direction for data sharing as changes and enhancements to their existing system are made.

The actual implementation schedule is based on the priorities, as determined by the North Dakota Traffic Records Coordinating Committee. It is reasonable to expect the schedule and initiatives to be impacted by resource availability including funding, staffing, priority changes, and new requirements.

This plan establishes the following goals or initiatives to be implemented, an initial time frame, and a scope of activities for each initiative:

1. Implement and enhance the integrated, automated motor vehicle crash reporting system.
2. Provide for improved electronic data sharing and system integration.
3. Enhance training and communications.
4. Improve access to online information.
5. Create an integrated, statewide citation tracking system.
6. Develop a statewide, integrated, emergency data-reporting system.
7. Increase Roadway Inventory Management System (RIMS) scope and depth.

Activities, as they are defined in this plan, were started in fiscal year 2001, with completion determined by available resources but expected in three to five years. The first step to be accomplished is to complete a thorough analysis of the technical and non-technical requirements and details needed to accomplish the initiatives. This analysis will determine the depth of work, establish timing, and facilitate more refined cost estimates.

### Goals

The goals or initiatives described here are the summary of strategic work or task groups to be accomplished. The grouping is based on the task interrelationship or logical segregation. Segregation allows for more simplified communication, planning, cost estimation, and work distribution. And as stated above, the initiatives are formed from the recommendations and

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goals from the National Highway Traffic Safety Administration Assessment Team assessment, members of the Traffic Records Committee, and the State. See appendix B for the State Traffic Records Coordinating Committee members.

### Summary

1. Implement and expand the integrated, automated motor vehicle crash reporting system.
2. Provide for improved electronic data sharing and system integration.
3. Enhance training and communications.
4. Improve access to online information.
5. Create an integrated, statewide citation tracking system.
6. Develop a statewide, integrated, emergency data-reporting system.
7. Increase roadway inventory scope and depth.

## **2. Electronic Crash Reporting (TRACS)**

### **Background**

The Traffic and Criminal Software (TraCS) is a sophisticated data collection and reporting tool for the public safety community. TraCS provides organizations with a state-of-art information management tool to streamline and automate the capture and transfer of incident data in the field. Using the latest mobile computing technologies to capture and report incident data where it occurs, TraCS improves the accuracy, completeness, and timeliness of incident data and reduces user's administrative duties and paperwork.

TraCS was developed by the Iowa Department of Transportation with funding assistance from several federal agencies. From its conception, TraCS was designed and developed using a flexible architecture that, with minor modifications, could be transferable and easily adapted and customized for use by agencies in states other than Iowa.

The TraCS is application software that, combined with laptop computers, one or more PCs in a central office, and data communications, provides officers with all of the functionality needed to record and retrieve incident information wherever and whenever an incident occurs.

Officers respond to many incidents every day and each incident requires paperwork and other administrative duties that take away from valuable patrol time. The TraCS software was developed in response to the need for a well-designed information management tool for the field officers that would simplify the data collection process and ease the administrative burden on officers.

In a paper form environment, officers are often required to copy the same information, such as names, addresses, and vehicle information, to multiple paper forms. TraCS eliminates this repetition through use of Common Information, which allows the user to enter certain types of data once and use it many times.

TraCS uses the latest mobile computing technologies to facilitate data collection where incidents occur. Officers have access to many tools to aid them in reporting events, including Officer Notes, customized data entry fields, and the ability to quickly diagram an accident scene using templates or hand-drawn input. All of these tools are available wherever and whenever they are needed.

### **TraCS Functionality Highlights**

TraCS includes these features and functionality:

- Data entry in the field.
- Validation of data entry in the field avoiding errors.
- Printing of forms in the field, including the crash worksheet, insurance cards, exchange of insurance information, and the Re-exam form.
- Flexible File Driven Edits and Validations.
- Barcode scanning of the drivers license and the vehicle registration information.

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- Diagramming of the crash.
- Image Capturing.
- GIS Incident Location Tool.
- Built-in 3-tier customizable Security.
- Automated uploading of data to the NDDOT.
- Windows 98, Windows 2000, Windows NT and Windows XP Compatibility.

### Validations

TraCS provides data validation functionality to ensure that forms are complete and accurate. Users receive immediate feedback regarding incorrect data and are prompted to correct any errors. Through the Windows SDK program, state agencies can specify the validation requirements that meet their own needs for each type of form. Validations can be executed online during data entry or in batch after data entry has been completed.

### Steering Committee – A Partnership of States

An important element of the National Model project is the collaboration of other agencies and states in extending the benefits of information technology for safety management. The goal is to provide an environment where the combined best practices and lessons learned are synthesized and used to maximize the benefits of safety technology.

The National Model or TraCS Steering Committee, comprised of all states licensed to use the TraCS software, meets periodically (two to three times per year) to discuss issues, share challenges and successes, and prioritize TraCS source code modifications and enhancements. The Federal Highway Administration (FHWA), National Highway Traffic Safety Administration (NHTSA), Federal Motor Carrier Safety Administration (FMCSA) and Bureau of Transportation Statistics (BTS) also participate in the meetings. Other states and organizations interested in observing the activities of the Steering Committee are also invited to attend these meetings, such as the American Association of Motor Vehicle Administrators (AAMVA) and the International Chiefs of Police.

The Steering Committee is chaired by the Iowa Department of Transportation. Iowa is interested in sharing the experience and lessons learned from implementing new technology for safety as well as in benefiting from the development efforts and experiences of other states and agencies.

## **Part 3: LAW ENFORCEMENT AGENCY SAFETY AREAS**

### Background

The North Dakota Peace Officers' Association Traffic Safety Committee serves as the primary liaison organization representing North Dakota law enforcement regarding traffic safety services and programs. This committee is comprised of law enforcement officials from state, county, and local agencies. The purpose of this committee is to provide advice and recommendations to the Traffic Safety Office regarding decisions on enforcement equipment (primarily radar), enforcement activities, and to aid with public awareness campaigns.

### Goal

To enforce North Dakota traffic laws through visible enforcement which will reduce traffic crashes and keep drivers traffic safety compliant.

### Existing Strategies

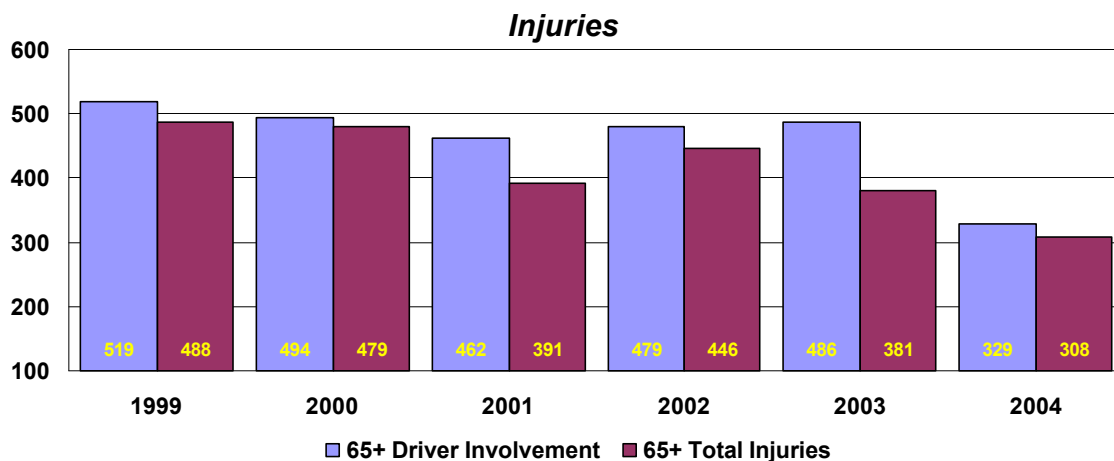
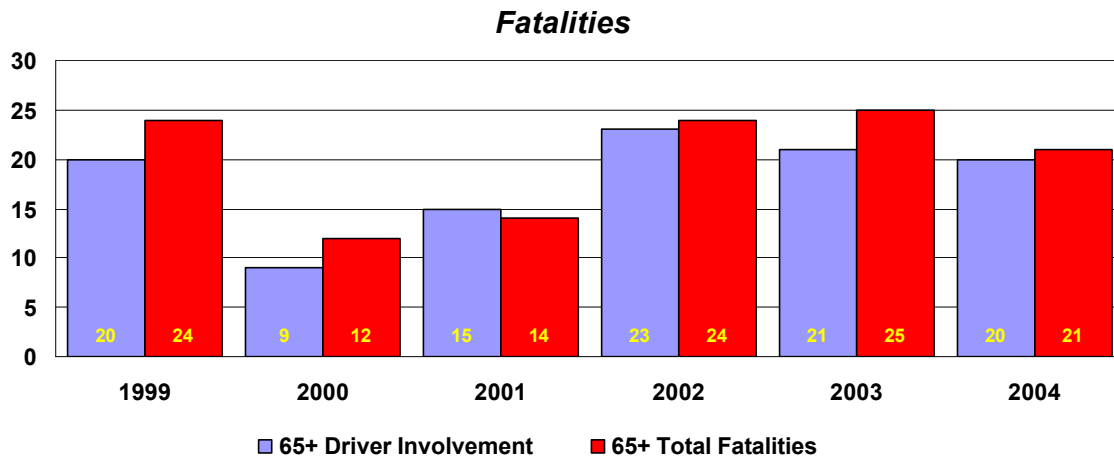
- Support funding of projects such as radar and video camera enforcement equipment.
- Support traffic safety trainings for law enforcement officers.
- Participate, when appropriate, on local Safe Communities programs.
- Work cooperatively with other law enforcement agencies on safety belt blitzes, impaired driving crackdowns, sobriety checkpoints and work zone safety.
- Provide technical assistance on legislative issues involving traffic safety.
- Participate in public awareness campaigns and media events when appropriate.
- Provide public education and enforcement for Red Light Running; Speed; and Work Zone violations.

## Part 4: NORTH DAKOTA DOT ENGINEERING SAFETY AREAS

### 1. Improvements to benefit “Older” Drivers

#### Background

North Dakota statistics show that over 16% (77912 out of 464762) of the driver licenses issued in North Dakota in 2004 were for persons aged 65 and older. During 2004, drivers aged 65 and over were not statistically overrepresented in fatal crashes (21 out of 136 drivers involved in fatal crashes or just under 16%). However, people aged 65 and older did account for 21% (21 out of 100) of the traffic fatality victims during 2004. The number of older citizens, whether they are drivers or passengers, is increasing each year and there is a continuing trend that North Dakotans are very interested in retaining their independence and personal mobility as they age.



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### Goal

Improve the safety and functionality of the road environment in a manner that recognizes the unique needs of aging and older drivers and provide resources that equip the older driver with tools that help them maintain their personal mobility and safely use the roads of North Dakota.

### Strategies

*Identify crash trends and population trends involving older drivers and develop and implement comprehensive countermeasures for features, locations or characteristics identified.*

- Monitor national state of the practice in addressing older driver crashes.
- Retrieve and analyze North Dakota crash data.
- Identify common roadway characteristics that may contribute older driver involvement in crashes.
- Develop and implement safety improvement projects and programs.

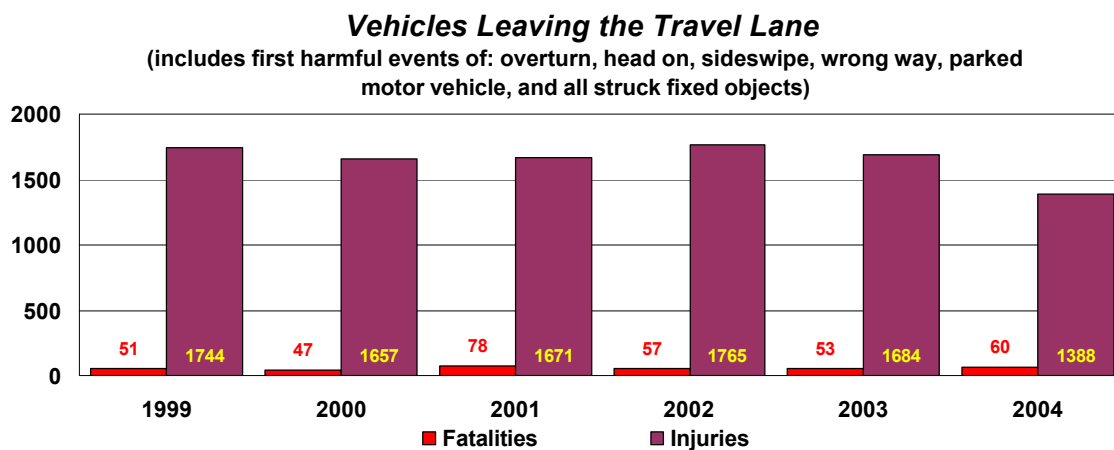
*Provide tools and outreach to older drivers on engineering features and countermeasures being implemented to address older driver issues.*

- Continue and enhance improvements in design, operations and maintenance that recognize unique needs of older drivers.
- Continue to support and participate in interaction with groups that work to provide focus and direction for older driver characteristics and needs.
- Continue to support a comprehensive program to develop assessment methods aimed at the detection of at-risk drivers, maintenance or strengthening of older driver skills, and examination of alternative transportation options.

## 2. Improvements to Address “Lane Departure” Crashes

### Background

Factors such as driver fatigue, impaired driving, speeding, driving at night, curves, grades, weather, animals on the road and certain pavement conditions may all contribute to a vehicle leaving the roadway. To address the full extent of the problem, a comprehensive approach must be taken. Emphasis must be placed on keeping vehicles in their proper travel lanes and attempting to reduce the likelihood of them overturning or striking objects if they do leave the roadway. Minimizing the potential consequences if a crash does occur is also a primary objective. North Dakota statistics reflect that 60% of all traffic fatalities occurring in 2004 involved head-on, wrong-way, sideswipe, overturn or fixed object crashes as contributing factors.



### Goal

Minimize crashes due to vehicles leaving their intended travel lanes by making efforts to keep vehicles in their proper lanes and, when vehicles do depart from their travel lanes, reduce the possibility and/or severity of subsequent crashes that may follow.

### Strategies

*Identify locations having significant crash trends involving leaving the normal path of travel and develop and implement comprehensive countermeasures at these locations*

- Monitor national state of the practice in addressing lane departure crashes.
- Retrieve and analyze North Dakota crash data.
- Identify common roadway characteristics that may contribute to these crashes.
- Develop and implement safety improvement projects and programs.



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*Identify locations on planned projects that have roadway characteristics similar to those identified and consider implementation of possible countermeasures during project development.*

- Develop guidance in the Design Manual to assist designers in becoming aware of these contributing roadway conditions.
- Incorporate a quality control process to ensure that these roadway characteristics are addressed during plan reviews.
- Incorporate substantive-based safety countermeasures in projects.

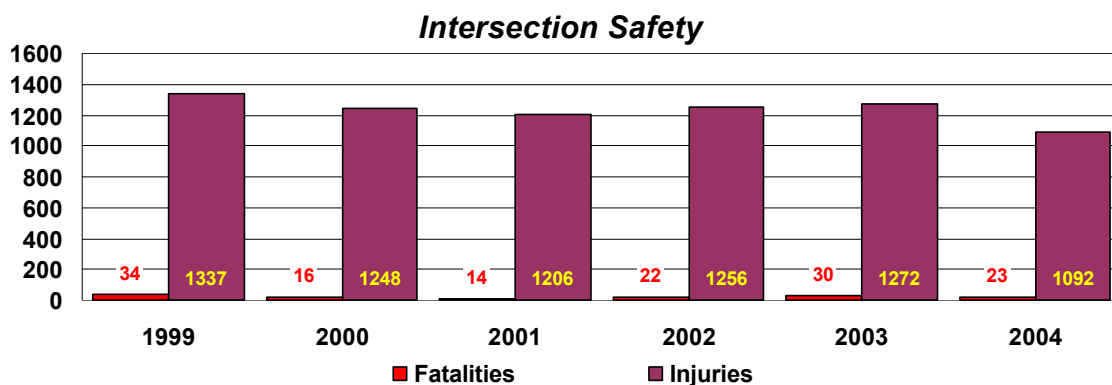
*Identify facilities that have roadway characteristics similar to those identified and consider implementation of corridor based or programmatic improvements.*

- Develop guidelines (selection criteria, funding levels, etc.) on how the program will be administered.
- Set targets for program implementation, based on funding allocations.
- Continue to develop and implement projects.

### 3. Improve Intersections Safety

#### Background

Vehicle crash statistics in North Dakota for 2003 indicate that over 25% of all traffic fatalities occurred at intersections. Because of increasing volumes of traffic and the increasing potential for vehicle/vehicle and vehicle/ pedestrian conflicts, it is recognized that new strategies and effective application of existing strategies are needed to address this critical area of traffic safety. The vast majority of intersection crashes occur in North Dakota's urban areas, but conversely, most of the fatalities associated with intersection crashes occur in rural areas. By implementing strategies in the areas of education, enforcement and engineering, intersection safety should be improved and these serious crashes should be reduced.



#### Goal

Improve the safety and operation of intersections by utilizing education, enforcement, and engineering tools and techniques.

#### Strategies

*Identify locations or features having significant intersection crash trends and develop and implement comprehensive countermeasures at these locations.*

- Identify high crash intersection locations and general trends in intersection safety both on and off the State Highway System.
- Prioritize/rank high-crash locations based on severity, frequency and rate of crashes.
- Conduct safety analyses, using established methodology.
- Develop, program, and implement improvement projects.
- Continue ongoing programs to upgrade rural T-intersections and improve traffic control device display visibility.

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*Improve the ability to enforce traffic violations at signalized intersections.*

- In cooperation with local agencies, identify sites where traffic signal violations are occurring.
- Share information with law enforcement agencies.
- Assess possible engineering strategies to improve traffic signal compliance and violation enforcement.
- Cooperate in outreach efforts to inform the public of problems and consequences of traffic signal violations.

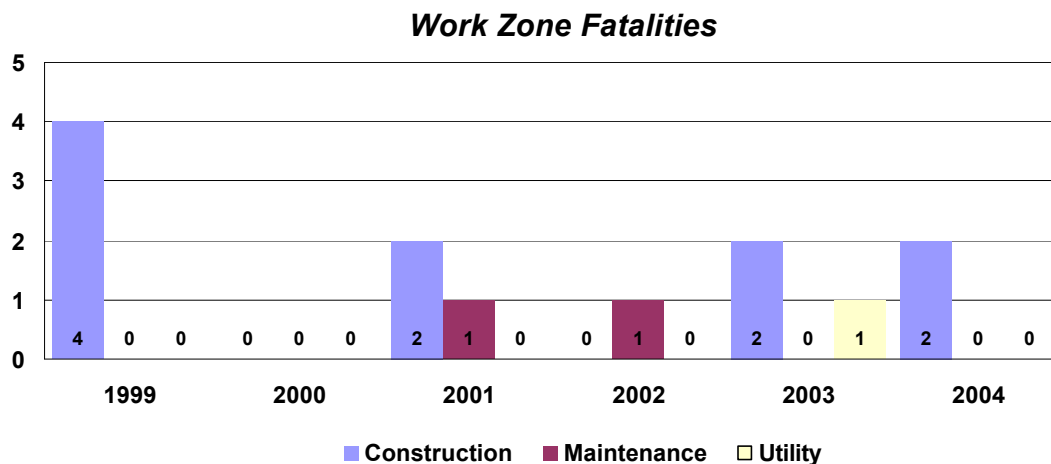
*Provide outreach to the public on intersection safety in urban and rural areas.*

- Identify and inventory existing intersection-related materials/resources.
- Define target audiences and partners to assist with educational efforts.
- Define minimum activities/guidelines for program implementation.

#### 4. Improve Construction, Maintenance, and Utility Work Zone Safety

##### Background

During the past six years (1999 – 2004), there were 13 fatalities in work zones in North Dakota, compared to 6 fatalities in the preceding 6 years (1992 – 1997). This represents a significant increase percentage-wise. Traditionally North Dakota has been successful in keeping the number of fatalities and injuries in work zones low, but with an increasing number of reconstruction and resurfacing projects being undertaken each year, ensuring safety of work zones remains a continuing priority.



##### Goal

Improve the safety and functionality of the road environment in work zones in a manner that recognizes the unique challenges that work zones pose to motorists and workers within the roadway.

##### Strategies

*Continue the Department's Traffic Control Review.*

- Continue strengthening and emphasizing training in work zone traffic control.
- Continue to stress public information and educational activities during National Work Zone Awareness Week, construction season, and winter driving season.
- Implement improved methods to reduce the duration of work activities.
- Continue to refine methods, processes, specifications, pay items, design standards, and devices for effective and efficient work zone operations.

## North Dakota Department of Transportation Comprehensive Safety Plan

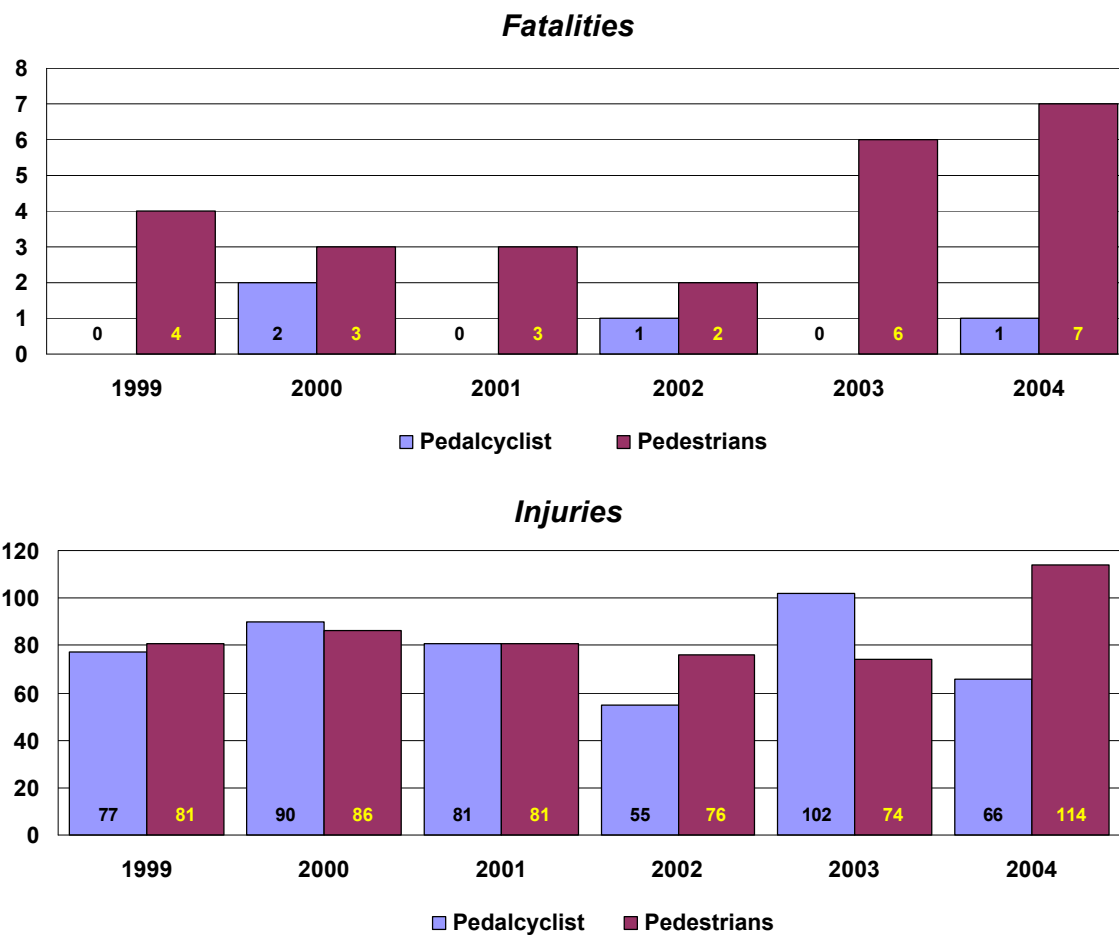
*Work cooperatively with law enforcement officers to control speeds and enforce traffic laws in work zones.*

- Involve law enforcement in project planning for major projects to assure good understanding of project phasing and to obtain feedback on methods that could be used to improve enforcement activities.
- Keep law enforcement informed about major changes in project traffic phasing.
- Encourage routine information sharing between project personnel and law enforcement on crash problems or near misses that may indicate need for additional enforcement or revisions in traffic control features.

## 5. Improve Pedestrian and Bicyclist Safety

### Background

Traffic crashes involving pedestrians and bicyclists comprised about 8% of all fatalities in 2004. North Dakota's rates for these modes consistently have been among the lowest in the nation, but nevertheless there is strong support in the urban areas to continue to maintain and improve the safety for these modes. Bicycling and walking as modes of recreation and transportation are on the increase in the state. Thus, although these modes appear to be relatively safe on an exposure basis, continued attention is needed to this component of North Dakota's safety program.



### Goal

Implement a comprehensive approach to provide a safer pedestrian and bicycle travel environment through engineering, education, and enforcement.

## Strategies

*In cooperation with local agencies, identify high pedestrian and bicycle use areas and consider available options in the engineering, education, and enforcement areas to promote safe operations.*

- Identify high use areas that have crash history or potential for emerging crash problems.
- Analyze high use areas for crashes including patterns and causal factors such as lighting conditions, demographics, special events, or other pertinent features.
- Identify possible safety enhancement measures and implement them through engineering projects, enforcement, and/or education.

*Identify pedestrian/bicycle facility discontinuities and assist local agencies in developing projects to correct them.*

- In cooperation with local agencies, identify deficiencies/gaps using available data and/or field reviews.
- Develop and implement priority projects to correct deficiencies and/or close the gaps.

*Implement a comprehensive pedestrian and bicycle traffic safety education program targeting elementary schools.*

- Prioritize school area needs based on proximity to high traffic corridors, status of current traffic safety programs, and high percentage of children walking or bicycling to school.
- Implement traffic safety education programs in cooperation with Safe Communities Programs.
- Follow Americans with Disabilities Act (ADA) for pedestrian safety.

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## North Dakota Department of Transportation Comprehensive Safety Plan

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